Commonwealth of Kentucky
Division for Air Quality

STATEMENT OF BASIS / SUMMARY

Title V, Operating
Permit: V-20-003
LSC Communications US, LLC
13487 South Preston Highway
Lebanon Junction, KY 40150
February 5, 2020
Jonathon Hughes, Reviewer

SOURCE ID:	21-029-00032
AGENCY INTEREST:	470
ACTIVITY:	APE20190001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 2721, Periodicals: Publishing, or Publishing and Printing

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☐ Yes ☒ No If Yes, See Section 4, Table A

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Bullitt
Nonattainment Area ☒ N/A ☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☒ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☐ Yes ☒ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☐ Yes ☒ No
If yes, list which pollutant(s):

PTE* greater than 25 tpy for combined HAP ☐ Yes ☒ No

*PTE does not include self-imposed emission limitations.

Description of Facility:
The facility prints magazines using offset lithographic presses, each with a natural gas fired dryer and propane as a backup fuel. In general, inks, fountain solutions, and cleaning solutions are the primary emission sources of VOC's as well as hazardous air pollutants (HAPs). The natural gas fired dryers are the main source of carbon monoxide (CO) and nitrogen oxides (NO_x).

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: V-20-003 Activities: APE20190001

Received: December 19, 2019 Application Complete Date: January 28, 2020

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☐ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐Yes ☒No NSR Applicable? ☐Yes ☒No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☐Yes ☒No

Description of Action:

- Renewal permit, no new construction requested.
- Increased maximum usage rates of fountain solution for 10 presses.
- Redesignated boilers X1 and X2 as EP23.

V-20-003 Emission Summary		
Pollutant	2018 Actual (tpy)	PTE V-20-003 (tpy)
CO	4.31	43.8
NOx	5.23	70.5
PT	0.39	4.24
PM_{10}	0.39	4.24
$PM_{2.5}$	0.39	3.25
SO_2	0.04	1.42
VOC	42.8	132
Lead	0	0
Greenhouse Gases (GHGs)		
Carbon Dioxide	6120	63700
Methane	0.12	0.60
Nitrous Oxide	0.11	0.57
CO_2 Equivalent (CO_2e)	6150	63900
Hazardous Air Pollutants (HAPs)		
Combined HAPs:	0.87	1.11

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Units #2, 3, 4, 6, 22 Lithographic Presses

Initial Construction Date:
EP 2, 04/1991 **EP 3**, 04/1991 **EP 4**, 10/1993 **EP 6**, 02/1994 **EP 22**, 06/2017

Process Description:

EP 2 Hantscho - 8 Unit Web Offset Heatset Lithographic Printing Press 401
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 50 lbs/hr
MP2: Fountain solution – 2.5 lbs/hr
MP3: Auto Blanket wash – 0.563 gal/hr
MP4: Dryer (4.76 MMBTU/hr natural gas fired (propane as back up))

EP 3 Hantscho - 5 Unit Web Offset Heatset Lithographic Printing Press 404
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 50 lbs/hr
MP2: Fountain solution - 1.5 lbs/hr
MP3: Auto Blanket wash – 0.35 gal/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))

EP 4 Hantscho - 6 Unit Web Offset Heatset Lithographic Printing Press 406
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 60 lbs/hr
MP2: Fountain solution – 2.0 lbs/hr
MP3: Manual Blanket wash – 0.35 gal/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))

EP 6 Hantscho Mark VII - 9 Unit Web Offset Heatset Lithographic Printing Press 407
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 60 lbs/hr
MP2: Fountain solution – 2.75 lbs/hr
MP3: Manual Blanket wash – 0.625 gal/hr
MP4: Dryer (6.4 MMBTU/hr natural gas fired (propane as back up))

EP 22 Hantscho Mark IV-6 Unit Web Offset Heatset Lithographic Printing Press 405
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 30 lbs/hr.
MP2: Fountain solution – 2.0 lbs/hr.
MP3: Auto Blanket wash – 0.425 gal/hr.
MP4: Dryer (Two 2.0 MMBTU/hr natural gas fired burners (propane as back up))

Emission Units #2, 3, 4, 6, 22 Lithographic Presses

Applicable Regulations:

401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances,* applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Comments:

Presses grouped here are controlled by EP 15 RTO. Presses grouped here do not have individual VOC limits. Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Lithographic Printing Presses

For the inks (heat set litho presses), it is assumed that 80% of the VOCs contained in the ink are captured and conveyed to the control device. The remaining 20% is retained in the substrate.

For the fountain solutions, it is assumed that 70% of the VOC content is captured and conveyed to the control device. The remaining portion is emitted.

For the wash solutions, it is assumed that 40% of the VOC content is captured and conveyed to the control device. The remaining portion is emitted.

Emission Unit #7 Hantscho Mark XVI - 8 Unit Web Offset Heatset Lithographic Printing Press 411				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	20 tpy	401 KAR 51:017	Material Balance & MSDS	RTO, Testing

Initial Construction Date: 05/1997

Process Description:
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution – 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.563 gal/hr.
MP4: Dryer (6.48 MMBTU/hr natural gas fired (propane as back up))

Applicable Regulation:
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Precluded Regulations:
401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, is precluded due to the VOC emissions limit for press 411.

Comments:
Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Emission Unit #13 Man Roland - 5 Unit Web Offset Heatset Lithographic Printing Press 416				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	10 tpy	401 KAR 51:052	Material Balance & MSDS	RTO, Testing

Initial Construction Date: 04/2005

Process Description:
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 75 lbs/hr.
MP2: Fountain solution - 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.29 gal/hr.
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))

Applicable Regulations:
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances,* applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

40 CFR Part 64, *Compliance Assurance Monitoring (CAM),* applicable to pollutant-specific emissions units at a major source that are subject to emission limitations for VOC's with potential pre-control device emissions that are equal to or greater than 100 tpy and that use a regenerative thermal oxidizer for VOC control.

Precluded Regulation:
401 KAR 51:052, *Review of New Sources in or Impacting upon Nonattainment Areas,* is precluded due to the VOC emissions limit for press 416.

Comments:
Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Emission Unit #16 Man Roland - 4 Unit Web Offset Heatset Lithographic Printing Press 418				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	39 tpy	401 KAR 51:017	Material Balance & MSDS	RTO, Testing

Initial Construction Date: 07/2008

Process Description:
Controls: MEGTEC Cleanswitch CS-300-95-HT thermal oxidizer (EP 15)

MP1: Maximum continuous rating: Ink - 75 lbs/hr.
MP2: Fountain solution - 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.29 gal/hr.
MP4: Dryer (3.0 MMBTU/hr natural gas fired (propane as back up))

Applicable Regulations:
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*, applicable to pollutant-specific emissions units at a major source that are subject to emission limitations for VOC's with potential pre-control device emissions that are equal to or greater than 100 tpy and that use a regenerative thermal oxidizer for VOC control.

Precluded Regulations:
401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, is precluded due to the VOC emissions limit for press 418.

Comments:
Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Emission Units #10, 11, 12 Lithographic Presses

Initial Construction Date:
EP 10, 06/2001 **EP 11**, 06/2002 **EP 12**, 06/2002

Process Description:

EP 10 Hantscho Mark VI - 4 Unit Web Offset Heatset Lithographic Printing Press 412
Controls: MEGTEC Cleanswitch CS-200 thermal oxidizer (EP 21)

MP1: Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution – 1.5 lbs/hr.
MP3: Auto Blanket wash – 0.5 gal/hr
MP4: Dryer (1.8 MMBTU/hr natural gas fired (propane as back up))

EP 11 Man Roland 4 Unit Web Offset Heatset Lithographic Printing Press 414
Controls: MEGTEC Cleanswitch CS-200 thermal oxidizer (EP 21)

MP1: Maximum continuous rating: Ink - 60 lbs/hr.
MP2: Fountain solution - 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.288 gal/hr.
MP4: Dryer (3.0 MMBtu/hr natural gas fired (propane as back up))

EP 12 Man Roland 4 Unit Web Offset Heatset Lithographic Printing Press 415
Controls: MEGTEC Cleanswitch CS-200 thermal oxidizer (EP 21)

MP1: Maximum continuous rating: Ink - 60 lbs/hr.
MP2: Fountain solution - 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.288 gal/hr.
MP4: Dryer (3.0 MMBtu/hr natural gas fired (propane as back up))

Applicable Regulations:
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Comments:
Presses grouped here are controlled by EP 21 RTO. Presses grouped here do not have individual VOC limits. Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Emission Unit #8 Hantscho Mark VI - 4 Unit Web Offset Heatset Lithographic Printing Press 409				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	36 tpy	401 KAR 51:017	Material Balance & MSDS	RTO, Testing

Initial Construction Date: 03/1996

Process Description:
Controls: MEGTEC Cleanswitch CS-200 thermal oxidizer (EP 21)

MP1: Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution – 1.5 lb/hr.
MP3: Auto Blanket wash – 0.288 gal/hr
MP4: Dryer (2.8 MMBTU/hr natural gas fired (propane as back up))

Applicable Regulations:
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Precluded Regulations:
401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, is precluded due to the VOC emissions limit for press 409.

Comments:
Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Emission Unit #9 Hantscho - 8 Unit Web Offset Heatset Lithographic Printing Press 410				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
VOC	20 tpy	401 KAR 51:017	Material Balance & MSDS	RTO, Testing

Initial Construction Date: 01/1999

Process Description:
Controls: MEGTEC Cleanswitch CS-200 thermal oxidizer (EP 21)

MP1: Maximum continuous rating: Ink - 50 lbs/hr.
MP2: Fountain solution – 2.5 lbs/hr.
MP3: Auto Blanket wash – 0.5 gal/hr
MP4: Dryer (4.0 MMBTU/hr natural gas fired (propane as back up))

Applicable Regulations:
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Precluded Regulations:
401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, is precluded due to the VOC emissions limit for press 410.

Comments:
Presses included here are subject to 401 KAR 50:012 and the thermal oxidizer shall have minimum destruction efficiency of 95% controlling each press' dryer exhaust.

Emission Unit #17 John Deere 6-Cylinder, 6.8 L, Diesel Emergency Generator
Emission Unit #18 Kohler 6-Cylinder, 16.1 L, Diesel Emergency Generator

Initial Construction Date: 2009

Process Description:
Two diesel emergency generators.

Applicable Regulations:
401 KAR 60:005, Section 2(2)(dddd) 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

401 KAR 63:002, Section 2(4)(eeee) 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: D.C. Circuit Court [*Delaware v. EPA*, 785 F. 3d 1 (D.C. Cir. 2015)] has vacated the provisions in 40 CFR 60, Subpart IIII that contain the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 60.4211(f)(2)(ii)-(iii). The D.C. Circuit Court issued the mandate for the vacatur on May 4, 2016.

Comments:
John Deere 6-Cylinder, 6.8 L, Diesel Emergency Generator
Fuel Input: 1.66 MMBtu/hr
Power Output: 237 Horsepower (HP)

Kohler 6-Cylinder, 16.1 L, Diesel Emergency Generator
Fuel Input: 5.30 MMBtu/hr
Power Output: 757 Horsepower

Emission Unit #19 Detroit Diesel 500ROZD4, 15.9 L, Diesel Emergency Generator
Emission Unit #20 Cummins Diesel Firewater Pump Engine, 4.5 L

Initial Construction Date: 2000

Process Description:
Two diesel emergency generators.

Applicable Regulation:
401 KAR 63:002, Section 2(4)(eeee) 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: D.C. Circuit Court [*Delaware v. EPA*, 785 F. 3d 1 (D.C. Cir. 2015)] has vacated the provisions in 40 CFR 63, Subpart ZZZZ that contain the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 63.6640(f)(2)(ii)-(iii). The D.C. Circuit Court issued the mandate for the vacatur on May 4, 2016.

Comments:
Detroit Diesel 500ROZD4, 15.9 L, Diesel Emergency Generator
Fuel Input: 4.74 MMBtu/hr
Power Output: 677 Horsepower

Cummins Diesel Firewater Pump Engine, 4.5 L
Fuel Input: 1.17 MMBtu/hr
Power Output: 167 Horsepower

40 CFR 63.6590 (a)(1) *Existing stationary RICE*.
40 CFR 63.6590 (a)(1)(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

Emission Unit #23 X1 and X2 Boilers Emission Unit #24 Four (4) Natural Gas-Fired Hot Water Heaters				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	0.56 lb/MMBtu (EP23) 0.50 lb/MMBtu (EP24)	401 KAR 59:015, Section 4(1)(c)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion
Opacity	20% opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed based upon natural gas combustion
SO_2	3.0 lbs/MMBtu (EP23) 2.47 lbs/MMBtu (EP24)	401 KAR 59:015, Section 5(1)	AP-42 Chapter 1.4.	Assumed based upon natural gas combustion

Initial Construction Dates: 1993 (EP23), 2008 (EP24)

Process Description:
EP 23: Two boilers, 4.0 mmBTU/hr each. Natural gas, primary fuel; propane, secondary fuel.
EP 24: Four water heaters, 2.0 mmBTU/hr each. Natural gas.

Applicable Regulation:

401 KAR 59:015, New Indirect Heat Exchangers, applicable to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBtu/hr) commenced on or after April 9, 1972 (401 KAR 59:015, Section 2(1)).

Comments:
401 KAR 63:002, Section 2(4)(iiii) 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters does apply since the facility is not a major source of HAPs.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
21	RTO	VOC DRE	401 KAR 50:012	Every 5 years	Method 25A	95%	99.0%	RTO Temp 1569.5 °F	CMN20170001	11/29/17
15	RTO	VOC DRE	401 KAR 50:012	Every 5 years	Method 25A	95%	96.8%	RTO Temp 1585 °F	CMN20140001	11/18/14

Footnotes:

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
20 tpy VOC	To preclude 401 KAR 51:017	7
36 tpy VOC	To preclude 401 KAR 51:017	8
20 tpy VOC	To preclude 401 KAR 51:017	9
10 tpy VOC	To preclude 401 KAR 51:052	13
39 tpy VOC	To preclude 401 KAR 51:017	16

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 50:012, *General application*, effective June 24, 1992, requiring implementation of standards for national primary and secondary ambient air quality, specifies that control procedures that are reasonable, available, and practical be used.	2-4, 6-13, 16, 22
401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances,* applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.	2-4, 6-13, 16, 22
401 KAR 60:005, Section 2(2)(dddd) 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	17, 18
401 KAR 63:002, Section 2(4)(eeee) 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	17-20
401 KAR 59:015, *New Indirect Heat Exchangers*, applicable to indirect heat exchangers having a heat input capacity greater than one (1) million BTU per hour (MMBtu/hr) commenced on or after April 9, 1972 (401 KAR 59:015, Section 2(1)).	23, 24
40 CFR Part 64, *Compliance Assurance Monitoring (CAM),* applicable to pollutant-specific emissions units at a major source that are subject to emission limitations for VOC's with potential pre-control device emissions that are equal to or greater than 100 tpy and that use a regenerative thermal oxidizer for VOC control.	13, 16

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality,* is precluded due to the VOC emissions limit for press 410.	7-9, 16
401 KAR 51:052, *Review of New Sources in or Impacting upon Nonattainment Areas*, is precluded due to the VOC emissions limit for press 416.	13

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

Table D - Summary of Non Applicable Regulations:

N/A

Air Toxic Analysis

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*
The Division for Air Quality (Division) has performed SCREEN View on February 5, 2020 of potentially hazardous matter or toxic substances (Cumene, Methyl Isobutyl Ketone, Naphthalene, Triethyl Amine) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

Single Source Determination
N/A

SECTION 5 – PERMITTING HISTORY

Permit	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
V-05-014	Renewal	APE20050001	2/19/2005	5/20/2005	Renewal	N/A
V-05-014 R1	Revision	APE20080001	3/24/2008	6/19/2008	Construction of new offset press (EP16)	N/A
V-09-040	Renewal	APE20090001	12/28/2009	7/22/2010	Renewal	N/A
V-09-040 R1	Revision	APE20110003	12/27/2011	5/29/2012	Addition of (3) diesel generators and (1) diesel firepump; Replace RTO	N/A
V-15-003	Renewal	APE20150001	1/30/2015	6/30/2015	Renewal	N/A
V-15-003 R1	Revision	APE20160001	1/4/2017	3/7/2017	Minor Revision to add Press 405	N/A
V-15-003 R2	Revision	APE20170001	12/20/2017	12/28/2017	Name change from Publishers Printing Co. to LSC Communications US, LLC	N/A

SECTION 6 – PERMIT APPLICATION HISTORY

N/A

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS – Ambient Air Quality Standards
BACT – Best Available Control Technology
Btu – British thermal unit
CAM – Compliance Assurance Monitoring
CO – Carbon Monoxide
Division – Kentucky Division for Air Quality
ESP – Electrostatic Precipitator
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HF – Hydrogen Fluoride (Gaseous)
MSDS – Material Safety Data Sheets
mmHg – Millimeter of mercury column height
NAAQS – National Ambient Air Quality Standards
NESHAP – National Emissions Standards for Hazardous Air Pollutants
NO_x – Nitrogen Oxides
NSR – New Source Review
PM – Particulate Matter
PM_{10} – Particulate Matter equal to or smaller than 10 micrometers
$PM_{2.5}$ – Particulate Matter equal to or smaller than 2.5 micrometers
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit
SO_2 – Sulfur Dioxide
TF – Total Fluoride (Particulate & Gaseous)
VOC – Volatile Organic Compounds